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Exploring Illuminative Systems in Informal Networks of Adults

Amy K. Scatliff*

Fielding Graduate University, Santa Barbara, CA 93105-353

Abstract

Whenever we feel those 'higher' and hard to define sensations like synchronicity, love, wholeness, and appreciation is this a pattern or a metaphorical *illuminative system* that is part of a larger ecological network or evolutionary design meant to establish homeostasis within the planet? Meeting as groups in person, or posting online to an interactive website, adults track, record, and describe in layman's terms their everyday encounters with illumination. Illumination in this sense could encompass both spiritual and/or secular significance. Participants build data files of illuminative sensation recorded in video, text, sound bite, drawing, and/or journaling. This spatial and sensory awareness activity, initiating from an appreciative foundation, eventually leads to participants conducting informal skillshares where adults teach to one another the strengths they possess when illuminated. Next adults collectively design new courses, programs, and products for their immediate community. A pilot study reveals that adults yearn for opportunities to talk about illuminative moments with one another.

Keywords: Adult learning; appreciative inquiry; creativity; design thinking; generative metaphor; illumination

1. Introduction

In my doctoral research I explore the idea of adults leading creative information exchanges, fostering new skill development and personal relationships that could be designed around their preferences (loves)—or by what illuminates them. Early in my study at Fielding Graduate University, I was inspired by the evolutionary, social theories of Jared Diamond (1997) and Humberto Maturana and Francisco Varela's (1980) theory of autopoiesis (self-making) where living systems organize themselves into increasingly more diverse complexity to establish homeostasis. I envisioned a metaphorical *illuminative system* that would prompt adults to engage in informal, networked learning exchanges and encounters. In this model, participants construct their own meanings—both individually and collectively—of what would signify an *illuminative experience*. I further envisioned a grid stretched over the globe in which adults, after consciously recording these *illuminative points* in various locations, would go on to construct new ideas, courses, products, and programs as they were creatively inspired by this illuminative data. As adult learners continued to record and build from this data they would generate a network of

* Corresponding author *E-mail address*: ascatliff@email.fielding.edu

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illumination that would be part of a larger ecological or evolutionary design meant to establish homeostasis within the planet. These encounters would be inspired by moments of illumination, which adults experienced and recorded as environmental triggers that they felt in everyday spaces. Illumination could denote any feeling such as higher order, wholeness, love, *flow*, synchronicity, joy, and a sense of deep connection.

My initial illuminative conjectures eventually developed into a central question that would steer my doctoral research: Is it possible to develop an andragogical framework that guides the increase of individual and collective moments of illumination, as adult learners systemically report it? The topics listed below were each relevant themes to how we can encourage skills for adults in creative problem solving, capacity building, systems thinking and participatory action research methods in the framework of informal lifelong learning. Each area informed the design of a pilot study examining the first stages of a seven-step process within an illuminative andragogy. Appreciative inquiry methods, the broaden-and-build theory and concepts of flow stemming from the expanding positive psychology movement (Cooperrider & Srivastva, 2004; Csikszentmihalyi, 1997; Fredrickson, 2003; Seligman, 2002) came forth. The current phenomena of the everyday learner using Web 2.0 media and open education resources to co-opt social research methods formerly restricted to social scientists (Jenkins et al., 2006; Seely Brown & Duguid, 2000; Walsh-Bowers, 2002) surfaced as well. Writings on creative thought, design thinking and user centered research (Mau & Leonard, 2004; Miller, 2004; Norman, 2002) reflected influential principles in how to merge time-honored adult learning theories (Dewey, 1980; Knowles, 1975; Schön, 1983) within an increasingly design influenced world. Systemic thinkers Mihai Spariosu (2004) and Jamshid Gharajedaghi (1999) deepened this generative metaphor of an illuminative system, which had first been inspired by Diamond, Maturana, and Varela. Finally, the writings of Paulo Freire (1970) and Ivan Illich (1970) introduced the wisdom embedded in critical pedagogy, situated learning, and convivial sharing that could reach the heart of this potential illuminative action as a capacity building initiative.

The influence of positive psychology and appreciative inquiry shifts the focus of problem-based learning, especially within a design thinking process, to a more appreciative approach—at the same time maintaining a liberatory objective. As Freire wrote, "When challenged by a critical educator, students begin to understand that the more profound dimension of their freedom lies exactly in the recognition of constraints that can be overcome" (Freire, 1987, p.48). What I call an *appreciative engineer* then understands the dimension of their freedom lies in the process of expanding upon illuminative sensations and creating networked collaborations (rather than focusing on constraints) as a means of liberation. The illuminative system becomes a mindful way of approaching conflict, dealing with interstices of overlapping culture, new technologies, and shifting resources all embedded in the everyday social activities of adults. The introduction of a generative metaphor intervention (Barrett & Cooperrider, 2002) within the context of a participatory action research project is an indirect, non-threatening way of building unity and trust among family and friends through creative recording, dialoguing, teaching, and eventual collaboration with one another.

2. Illuminative system

From these interdisciplinary themes I conceptualized an exploratory seven-step process that could help flesh out a structure for a broader public research project. The hypothesized seven steps of the illuminative andragogy are listed below:

Step One: Sensing illumination in everyday space.

Step Two: Documenting these sensations and the spaces in which they occur by taking photos, making journal recordings, sketching, taking video/sound recording, and noting location on maps.

Step Three: Sharing with others their *illuminative data* in an *illuminative cluster* either in person or in an online community.

Step Four: Exploring how feeling illuminative moments often represents a natural strength, ability, or skill in oneself or others.

Step Five: Teaching one another through informal skillshares the various strengths that each person possesses when the person feels illuminated. This could be any skill that is admired in oneself or collectively by the group.

Step Six: Expanding contextual awareness by discussing how each person *sees* various spaces where the person documented triggers of illumination. Members of the group envision how they can match skill and illuminative sensation to a particular space by brainstorming creative ventures, learning opportunities, and new products that can be embedded into a specific site.

Step Seven: Transforming members' brainstorms into actual collaborations by matching contextual spaces, skills, and sensations. Even if an initial effort does not take root, members will have more buoyancy to continue on to thenext "prototype" and trial run…and then back to STEP ONE to start over.

3. Capacity building in public space

The pilot study described in this proposal was an exploratory study of the interaction happening within the first three stages of this seven-step illuminative process. The study was comprised of two groups of volunteer participants from an informal pool of friends and family within my social network. Two peer members (myself and a friend in Minneapolis) coordinated a month long study with one group meeting in a face-to-face exchange in Minneapolis and the other an internet mediated exchange with participants from Philadelphia, Los Angeles and Amsterdam. There were a total of 12 participants. The median age range was 25-40, 83% were female, and 58% were African American. All had at least some college education, while 50% had some kind of graduate degree.

4. Method

Participants were asked to consider the question, is there a pattern or *illuminative system* that is part of a larger ecological network or evolutionary design meant to establish homeostasis within the planet? In the context of identifying what sensations potentially "held the planet together," participants contemplated what illuminative sensation meant to them. The peer leaders asked the participants to take *at least 10 minutes one time a week for four weeks to record in their diaries public spaces they occupied where they felt any of their illuminative perceptions.* For purposes of simplifying this first study we excluded spaces located in one's home. The participants could record these moments by photo, quick notes, sketches, journaling—and any other manner they chose. They were instructed to describe the "who, what, where, when and how" of each of their recorded experiences that occurred in public spaces. These settings could include any space such as on the street walking to work, grocery stores, at places of employment or schooling, a health care clinic, or the bank.

Participants received the following tips on tracking illumination: (a) What was the image, sensation, sound, person, etc. that triggered one of these sensations in you in this particular public place? (b) Can you describe the sensation? Was it bodily? A thought process? Both? (c) Is there a specific memory tied to this sensation or to the trigger for the sensation? Can you describe the memory? (d) Would you like to sketch an image, take a photo, or record a sound about the triggers, sensations, or memories you experienced as you walked around various public spaces? Peer facilitators then were responsible for a weekly collection of these recorded experiences submitted either by personal e-mail or posted to a public web board created for the study. The face-to-face group met at a social gathering (dinner) at the beginning and end of the month long study, while the other group worked individually with the peer coordinator by submitting private emails.

Content and thematic analyses were used to characterize the types of illuminative experiences, participants' definitions of illuminative perception, and their reactions to the process. A sampling of emerging themes was: being appreciated, nature, viewing sports, time with friends and family, religion, experiencing synchronicity, and artistic inspiration. Here are some moments of illumination reported in the study by participants: Seeing a hawk while running; observing dolphins swim north in the Atlantic Ocean; falling asleep on a car trip to the sounds of people around laughing and talking; seeing someone on the street who inspires a screenplay character; watching the Chicago Cubs play baseball; attending a church picnic; being told to consider a master's program by an instructor; driving slowly home in a snowstorm and seeing the empty streets.

5. Findings of the pilot study

After qualitative analysis of the data, the following preliminary findings emerged: 1) A majority of adults in the study expressed interest in having more opportunities for sharing about illuminative moments with one another; 2) Participants were surprised and interested in the differences of how they interpreted illuminative perception and found it was enlightening to reflect upon internally and to discuss with others; 3) Sensing, recording and discussing illuminative perceptions takes time and emotional investment for some participants, especially those inhibited by depressive or anxious behavioral pattern.

6. Stages four – seven of the illuminative andragogy

As the stages progress in the illuminative andragogy, activity becomes increasingly more collaborative and project based. There are a multitude of creative directions a cluster could take as adults identify individual moments of illumination, each other's teachable skills, and potential settings for new events, programs, and courses, etc. I envision that each stage of the andragogy can be experienced as a *complete level in itself* with the participants going no further than the activity set for that stage. Or if members chose, they progress to more collaborative work. Below is an example of a process that is loosely based on an informal project put together by myself and a group of friends that mirrored many of the steps of the illuminative andragogy.

Four illuminative observations from participants:

Participant One: Talking with a grocery store employee about cheese and beer

Participant Two: Being appreciated for organizing a meeting

Participant Three: Relating to a passage in a sermon in a new way

Participant Four: Laying in the grass, listening to an iPod and watching the clouds

These observations could be applied in the andragogy in the following ways:

In stages four and five of the illuminative andragogy, the group decides that Participant One is skilled in appreciating, discussing and creating meals for others. They ask her to teach the illuminative cluster several cooking classes in a skillshare. Participant Two, who is great at organizing events, would hold a small session for the group explaining the top three events she put together in the past and what made them a success. Participant Three would lead a session having others in the group read passages to her from various favorite texts and she would work with them on interpreting new meanings that related to their lives. Participant Four, who in day-to-day encounters generally reports being the most relaxed of the group, would lead a small class about how to incorporate relaxation into a work week.

In stages six and seven of the illuminative andragogy, the cluster would gather and discuss how each of these skills could be planted into a collaborative project. The group creates The Relaxation Day for an area battered women's shelter, which is a one-day event on relaxation. The shelter was the workplace of Participant Two and the setting of her last successful meeting. Participant One puts together a class for the women on how to cook easy, inexpensive yet appetizing meals based on her own experience of being a single mom living on a tight budget. Participant Four designs a session for the women helping them brainstorm new ways to incorporate moments of relaxation into their day. She also helps each woman design a relaxation mix of their favorite music. Participant Three gathers inspiring speeches given by prominent women and makes a packet for the attendees of The Relaxation Day to take with them at the end of the event.

As the stages become increasingly more collaborative and project based—ranging from events for friends and family to the broader community—various questions come up. Is it easy for participants to translate what feels as illumination into what is a teachable skill? How do participants learn the best way to teach each other their skills in the experience of a cluster? How do members figure out who is the best at what role in a group project? What constitutes a creative venture especially whether the venture is a moneymaking opportunity? How could the women at the shelter form their own illuminative cluster? How could clusters eventually work together to design creative

ventures?

I have not answered these questions yet, but in my dissertation and in post-doctoral research I want to build andragogical steps that will (a) link people together both at a distance with online interfaces and face-to-face meetings between friends, family and neighbors to (b) provide an opportunity for adults to share their variety of experiences in a way that will (c) inspire confidence in creative collaboration based upon the theme of illuminative design—especially for those who exhibit depressive or anxious patterns.

7. Implications for research and practice

Innovation specialist John Seely Brown cites that worldwide there are 30 million people who are able to study at a university but have no institution to attend. In the next decade this number will grow to 100 million (Seely Brown & Adler, 2008). Seely Brown has long advocated for university and corporate institutions to offer open source education communities using Web 2.0 technologies. He believes that by expanding opportunities for the general public to "tinker" with open source information inside new communities of practice (Lave & Wegner, 1991), valuable knowledge ecologies like the Silicon Valley will sprout up across the globe. In his recent article Minds on Fire: Open Education, the Long Tail, and Learning 2.0 in *EDUCAUSE Review* Seely Brown (2008) writes, "We need to construct shared, distributed, reflective practicums in which experiences are collected, vetted, clustered, commented on, and tried out in new contexts" (Closing the Loop, para. 2). This brings in the question, how might the illuminative method engage adults to build informal reflective practicums in support of innovative knowledge building and collaborative creativity? Could this method be flexible enough so that adults gain essential creative, appreciative and complex thinking skills within their social network whether they have full or limited access to technology?

With the thousands of learning communities sprouting up through the efforts of large universities to independent groups of citizens, the meaning of adult education and informal learning is changing. Web 2.0 media, the proliferation of mobile computing, expansion of user generated content, and open source educational resources suggest that adult learning can no longer be perceived solely as formal classroom-based experiences sponsored through educational institutions. Learning environments have become more nebulous—as multi-sensory, multi-place knowledge networks that can happen anywhere. To be a lifelong learner now includes a variety of activities, anything from surfing www.amazon.com for books or alerting friends about the next Facebook group gathering to forming a study session around an MIT open source class on the creative process. More importantly, one time learning opportunities may now have web-enabled communities wrapped around them so that participants are part of an instant social network as soon as they pursue any interest or learning objective.

In a time of continuous partial attention (Stone, 2007) and easy to construct social network software, the Internet offers a mixture of thriving Web 2.0 communities as well as sites that have turned into ghost towns. Adults log on to certain networks for a while until they are captured by another interest. It can be an overwhelming effort to feel grounded when bouncing between social networks stretched across online and in-person environments. In this disjointed state learners become susceptible to falling prey to forces that tout educational community, creative activity and sociality for varied reasons. Social networks blend into learning environments that turn into corporate initiatives that feed back into social networks—blurring what it means to educate and improve oneself as a lifelong learner. As social networking sites are now integrated through mobile networks with constant communication from applications like Twitter, there is a potential for people's lives to be consumed at almost every turn by this blend of learning, creating and socializing. At the same time online participatory communities can fill a tremendous need. I have envisioned a regenerating system that helps adults build skills in appreciative and creative thinking in a less isolating, expensive or overwhelming experience. This system supports adults' time conducting skill shares and collaborative works within groups of friends—called illuminative clusters. An illuminative cluster of friends could mean anyone who shares some form of affinity, including family, neighbors, and work colleagues. A cluster for example would contain one's grandfather, a cousin, two best friends since childhood, and a long-time neighbor, all who live within five miles of one another. A cluster could also be made up of friends and family who are scattered across the globe and connected online.

The seven stages are designed so that adults can meet regularly—either online, in-person, or a blend of the two—and follow the stages in their own timeframe. The varied stages are aimed at strengthening a social network of people through team building, skill sharing, and creative exercises that help to invigorate anything from personal

relationships to new grassroots economic development. Through this form of community building people could establish more positive ways of relating to one another.

The illuminative method is anchored in stage five where adults teach one another through informal skill shares the various strengths that each person possesses when they feel illuminated. This could be any skill that is admired in oneself or collectively by the group. Stages one through four of the system are designed to support stage five by helping adults identify where their natural skills, strengths and interests appear in everyday environments. In stages six and seven adults practice thinking contextually when matching skills and interests—derived from illuminative data—to creatively brainstorm with one another on how to solve various personal, local and global challenges.

All seven stages of the method are designed to be flexible enough to be completed on their own or in their entirety. If friends and family are separated across the globe, cluster members can use social networking software to hold meetings, share information with one another, and conduct skill shares. If there is a generational or digital divide, adults can just as easily meet in person and record data using a pad and paper. At the same time various stages allow for teachable moments on how to learn new technology that assists the observational, recording and creative processes. The idea is that a close social network of people decides the structure of the system rather than the technology excluding certain members from taking part. This integrative framework may form a basis for successful and sustainable innovation.

8. Conclusion

The pilot study revealed that a majority of the participants expressed interest in having more opportunities for sharing about illuminative moments with one another. At the same time, some participants reported feeling anxious in the process of observing their daily patterns. Using exercises influenced by positive psychology and appreciative inquiry methodology, help adults achieve a new awareness of their thinking and behavioral patterns in a more encouraging and affirmative light. These exercises may assist people in feeling more comfortable when uncovering new skills and interests that they can refine and then apply in beneficial and creative ways. At this developmental stage, I am piloting the acceptability and feasibility of stages one through three of the illuminative method. Further study of these stages will increase the robustness of this kind of intervention as well as uncover insights for testing later stages.

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10. References

Barrett, F., & Cooperrider, D. (2002). Generative metaphor intervention. In Diana Whitney Ronald Fry, Jane Seiling (Eds.), *Appreciative inquiry and organizational transformation* (pp. 121-45). Westport, CT: Quorum Books.

Cooperrider, D. L., & Srivastva, S. (2004). Appreciative inquiry in organizational life. In R. Woodman & W.

Pasmore (Vol. Eds.), *Research in organizational change and development*: Vol. 1: 129-169. Greenwich, CT: JAI Press Inc.

Csikszentmihalyi, M. (1997). *Finding flow: The psychology of engagement with everyday life*. New York: Basic Books.

Dewey, John. (1980). *Art as experience.* New York, NY: Perigee Books.

Diamond, J. (1997). *Guns, germs and steel: The fates of human societies*. New York, NY: W.W. Norton.

Fredrickson, B. L. (2003). The value of positive emotions. *American Scientist*. 91, 330 335.

Freire, P. (1970). *Pedagogy of the oppressed*. New York, NY: Seaburg Press.

Freire, P. (1987). *Literacy: Reading the word and the world*. New York, NY: Routledge.

Gharajedaghi, J. (1999). *Systems thinking: managing chaos and complexity.* Woburn: Butterworth-Heinemann.

Illich, I. (1970). *Deschooling society*. New York, NY: Harrow & Row.

Jenkins et al., (2006). *Confronting the challenges of participatory culture: Media education for the 21st century.* White paper.

Knowles, M.S. (1975). *Self-directed learning: A guide for learners and teachers*. New York, NY: Cambridge Book Co.

Lave, J., & Wenger E. (1991). *Situated learning legitimate peripheral participation: Learning in doing*. New York, NY: Cambridge University Press.

Maturana, H., & Varela, F. (1980). *Autopoiesis and cognition: The realization of the living*. Boston, MA: Reidel.

Mau, B & Leonard, J. (2004). *Massive change.* New York, NY: Phaidon Press.

Miller, P. (2004). *Rhythm science.* Cambridge, MA: The MIT Press.

Norman, D. A. (2002). *The design of everyday things*. New York, NY: Basic Books.

Schön, D. (1983). *The reflective practitioner: How professionals think in action.* New York, NY: Basic Books.

Seely Brown, J., & Adler, R. (2008). Minds on fire: open education, the long tail, and learning 2.0. *EDUCAUSE Review.* Retrieved February 12, 2009, from John Seely Brown Website: http://www.johnseelybrown.com/

Seely Brown, J., & Duguid, P. (2000). *The social life of information*. Boston, MA: Harvard Business School Press.

Seligman, M. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment.* New York, NY: Free Press/Simon and Schuster.

Spariosu, M. (2004). Global intelligence and human development. Cambridge, MA: MIT Press.

Stone, L. (2007). Continuous partial attention. Retrieved April 20, 2009, from Linda Stone Website: http://www.lindastone.net/

Walsh-Bowers, R. (2002). Constructing qualitative research: Students and faculty situate psychological knowledgemaking.*Canadian Psychology*, 43, 163-178.